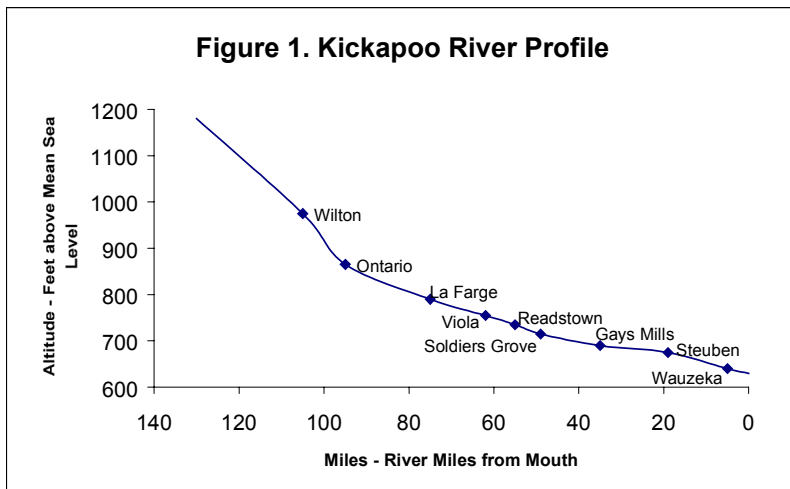


KICKAPOO RIVER MAIN STEM

Of all the tributaries to the Wisconsin River, the Kickapoo River is the longest. It begins in south central Monroe County and flows in a southerly direction for 130 miles through Vernon, Richland and Crawford Counties before reaching the Wisconsin River near the Village of Wauzeka. The Kickapoo River lies within a 768-square mile drainage basin in southwest Wisconsin. The entire basin is within the Driftless Area, the portion of the State not flattened by glaciers. Approximately 46% of the basin contains slopes of 15% or greater and another 23% of the basin contains lands with slopes between 8 and 15%.

The name Kickapoo is an Algonquin word meaning "one who goes here, then there" and accurately describes the Kickapoo River which flows in all directions of the compass for portions of its length. The Kickapoo River falls toward the Wisconsin River at an average rate of 5.9 feet per mile; however, the river is relatively steep in Monroe County with a gradient of 22.7 feet per mile compared to the much more gradual 3 feet per mile in Vernon, Richland and Crawford Counties. The meandering character of this river across its floodplain is the result of the relatively flat gradient. As the crow flies, the Kickapoo River extends approximately 60 miles from headwater to mouth, but the river flows for 130 miles, more than double that length.



Eight communities discharge treated wastewater to the Kickapoo River: Gays Mills, La Farge, Ontario, Readstown, Soldiers Grove, Viola, Wauzeka, and Wilton. The 2000 population of these communities range from 395 in Readstown to 768 in Wauzeka with an average of 610 people. Each facility has been issued a WPDES permit by the Wisconsin DNR to discharge treated wastewater to the river.

Kickapoo River At A Glance

| | |
|---------------------------------------|------|
| Drainage Area (m²): | 768 |
| Total River Miles: | 130 |
| Trout River Miles: | 60.4 |

Major Public Lands:

- ◆ Kickapoo River State Wildlife Area - Wauzeka Unit
- ◆ Kickapoo River State Wildlife Area - Bell Center Unit
- ◆ Kickapoo Valley Reserve
- ◆ Wildcat Mountain State Park
- ◆ Elroy-Sparta State Trail

Concerns and Issues:

- ◆ Nonpoint source pollution
- ◆ Streambank erosion

Initiatives and Projects:

- ◆ Wild trout reintroduction
- ◆ In-stream habitat restoration
- ◆ Continuous water temperature monitoring
- ◆ Citizen water quality monitoring
- ◆ Middle Kickapoo River Priority Watershed Project

The Kickapoo River drains 768 square miles of land dominated by agricultural activity (44%). Forests comprise approximately 41% of the basin. Wetlands make up a very small portion of the basin (nearly 2%) and are primarily found adjacent to the Kickapoo River within its extensive floodplain.

Table 1: Land Cover in the Kickapoo River Drainage Basin

| <i>Land Cover</i> | <i>Percent of Basin</i> |
|-----------------------------|-------------------------|
| Agriculture | 44.4% |
| Forest (Total) | 40.9% |
| <i>Broad-Leaf Deciduous</i> | <i>40.0%</i> |
| <i>Coniferous</i> | <i>0.88%</i> |
| Grassland | 11.5% |
| Wetland (Total) | 1.98% |
| <i>Emergent/Wet Meadow</i> | <i>1.34%</i> |
| <i>Forested</i> | <i>0.57%</i> |
| <i>Lowland Shrub</i> | <i>0.07%</i> |
| Other | 1.30% |

Fishery surveys of the Kickapoo River have been conducted numerous times over the years; however, due to the length of river, it has not been surveyed in its entirety within any one year. Survey years include 1959, 1962, 1969, 1970, 1973, 1993, 1999 and 2000. Upstream of Ontario, a 1993 survey documented a diverse forage fishery with some stocked brook and brown trout. Surveys conducted in 1999 and 2000 between Ontario and Gays Mills documented a total of 46 species, including an abundance of brown trout. Consequently, 60.4 miles of the Kickapoo River between Ontario and Gays Mills were recently classified as a Class II trout stream. Trout use this section of river for food and shelter, but likely spawn in tributary streams. The portion of the river below Gays Mills contains a diverse forage fishery as well as a more diverse sport fishery which includes walleye, sauger, smallmouth bass, largemouth bass, northern pike, channel catfish, bluegill and pumpkinseed.

Streambank erosion is a common sight throughout the Kickapoo River. Much of this erosion is not from current land management practices, but rather from severe sedimentation of the valley floor from poor land use management over much of the last century. This additional sediment on the valley floor resulted in the river cutting down through it to re-establish itself. Consequently many areas of the Kickapoo River contain vertical or nearly vertical banks of ten feet or more, limiting access by boats to those areas with more gentle banks.

Rivers by their very nature erode the valley they flow through. Most people think of streambank erosion as a rather ugly sight; however erosion of rock by the Kickapoo River has created beautiful sandstone cliffs adjacent to the river. This type of erosion is found largely in the upper half of the Kickapoo River. Some cliffs are large enough to create a micro-climate capable of supporting rare plants that prefer an isolated humid environment.

Historical Perspective of the Kickapoo River Basin

Pre-European Settlement: Before European settlement of the Kickapoo River Basin, the area was inhabited by many different Indian tribes for more than 2,000 years. The Ho-Chunk people (also known as Winnebago) were the most recent and numerous. The vegetation of the Kickapoo River Basin was curiously split between a sugar maple/basswood dominated forest and an oak-dominated forest. A small concentration of pines was found along the upper river and prairie was scattered and largely found in the western half of the basin. Prairies were kept treeless by periodic fires, some set by the indigenous people. The Kickapoo River itself seemed to serve as an effective firebreak in the southern half of the basin as evidenced by the stark difference in forest types on either side of the river. The only wetlands found were adjacent to the Kickapoo River between Viola and La Farge and near the Wisconsin River. The tributary streams were cold, clear, narrow and deep and contained abundant numbers of brook trout, the only inland trout native to Wisconsin. Deer, black bear, wild turkeys, ruffed grouse, squirrels, wolves, elk, bison, and songbirds were present throughout the area.

Post-European Settlement: European settlers began arriving in the basin by the early 1800's. People of various ethnic backgrounds settled in the basin, but Germans and Norwegians are the major ethnic groups residing in the basin today. By the 1850's, at least 50% of the basin was in agricultural production. The unique hill and valley characteristics of the Driftless Area influenced many cultural features of the region. Roads do not follow section lines, instead they wind through valleys or along ridgetops. Some township boundaries and other governing boundaries

sometimes follow a river rather than the man-made section lines. Conversely, property boundaries conformed to survey sections, which forced a square or rectangular farm onto very irregular topography. Much of the future soil erosion problems stemmed from this unfortunate choice of land parceling that did not follow land contours. Farmers cropped in square and rectangular shaped fields, as they had done in their homelands, with little regard for the steep slopes of the region. Some row crops were plowed up and down hills, creating an easy route for water to scour soil from hillsides.



Figure 2. Typical streambank erosion in the Driftless Area circa 1920.

The first major crop in the basin was wheat, but by the 1870's, the majority of agricultural income was derived from dairy. When the first farmers arrived in the basin, the land could support small numbers of livestock and the soil still retained the rich, water absorbing humus that had accumulated from centuries of forest and prairie vegetation. However, by the 1940's approximately 98% of the Kickapoo River Basin was in agriculture and only 2% of that was ungrazed woods. As the agricultural economy changed to dairy, trees were removed from

INSERT Map 1. Pre-European Settlement Vegetation of the Kickapoo River Basin

steep hillsides and more cows were allowed to graze them. The rich humus valley soils were drained of their nutrients and soil absorbing capacity by constant plowing and cropping. As the hillside soils compacted under the constant weight of grazing livestock and vegetation became sparse, rains began to quickly run off the hills rather than soak into the once spongy soil. Water carved massive gullies into hillsides, which moved tons of soil to the valley floor. Large amounts of runoff originating from ridge top fields also carved gullies into hillsides. Aldo Leopold once referred to rain on the hillsides of the Driftless Area as water running off a tin roof. By the 1930's, after nearly eighty years of cultivation and grazing, virtually every rainstorm resulted in flash floods. By this time, farming in the Kickapoo River Basin developed into a frustrating venture with every new rainstorm washing away valuable crops, pasture and soil. An average of 12 to 15 feet of soil was added to many valleys.



Figure 3. Installation of a field terrace on a Driftless Area farm circa 1934.

The once crystal clear streams which held brook trout were now shallow, wide, warm and full of silt. The tons of sediment that reached the valley floor buried many springs and groundwater seeps, causing many perennially flowing streams to become intermittent, flowing only after rainstorms. Streams became braided meanders with their channel lost to the massive amounts of sediment now in the valley. In-stream fish habitat was lost and the cold water brook trout were replaced by warmwater species such as suckers, carp, chubs and other minnows.

In 1934, the Soil Conservation Service, now named the Natural Resource Conservation Service, launched the Coon Valley Erosion Project in the Coon Creek Watershed, just ten miles west of the Kickapoo River. They asked farmers to allow men from the newly founded

Civilian Conservation Corp (C.C.C.) to enter their land and plant trees, fence livestock out of steep slopes, reconfigure fields to follow the hills' contours, plant grassed waterways, and stabilize gullies. Efforts to restore streams were also attempted by the addition of brushmats to eroding banks, wood and rock deflectors to force floodwaters away from streambanks toward the stream's center, and revegetation of raw streambanks. These land management practices were successfully adopted and are still in use today not only by farmers in the Coon Creek watershed, but also farmers in the Kickapoo River Basin as well as the entire Driftless Area, including parts of Minnesota, Iowa, and Illinois.

Changes throughout the 20th Century: Even after soil conservation measures were added to the land, immediate improvements were not visible. Flash floods continued to damage land and property in the basin. Major floods occurred in 1951, 1961 and again in 1965. It was about this time that a state biologist remarked that "because of watershed management problems...trout stream fishing in the coulee region may practically disappear in the future".

To stem flooding problems in the basin, a large dam at La Farge was proposed. (see History of the La Farge Dam Project inset)

It was during the 1940's to the 1960's that an improvement in land health could be seen as farms on marginal land in the basin did not survive and began to revert back to more natural conditions. During the 1970s, many farming operations were encouraged to expand and many landowners went deep into debt. When overvalued land values fell and interest rates remained high in the early to mid 1980's, many producers were forced to financially dissolve their farms. Large amounts of agriculturally worked land was purchased by hobby farmers, who were not interested in raising livestock or growing crops as their sole source of income.

Inconspicuously, the Food Security Act of 1985 enabled further improvement of the land and water resources of the Kickapoo River Basin. This act contained a component which required compliance with farm specific Conservation Plans in order to receive any kind of government subsidy. From 1983 to 1988, land under conservation tillage in the area increased over 700%. Wisconsin also began promoting Farmland Preservation Program conservation plans as a tool



Figure 4. A Driftless Area stream containing watercress in 1997.

to keep valuable soil on farm fields. The Conservation Reserve Program (CRP) also was a financial incentive to remove highly erodible land from crop rotation and replace with perennial vegetative cover.

Infiltration of rain and snowmelt into the ground increased approximately fifty years later after trees were planted, marginal cropland was converted to perennial vegetative cover and fewer livestock numbers grazed the hillsides. By the 1980's, springs reappeared, effectively cooling streams and causing intermittent streams to once again flow perennially.

Watercress, an aquatic plant indicative of groundwater inflow to a stream, was documented not only at springheads, but also further downstream on many small and medium sized streams.

In 1978, money became available from the Wisconsin state trout stamp fund to allow installation of in-stream habitat structures designed to improve trout streams around the state. Restoration efforts occurred on stream sections owned by the state or where streambank easements had been acquired. Brown trout have been stocked in many streams for many years, but carryover from year to year and natural reproduction was lacking. As streambanks became more stable, flood events less frequent, and infiltration of rain to groundwater increased, the streams of the Kickapoo River Basin held more water during dry periods and began to produce self-sustaining brown trout populations. Beginning in the mid-1990's, fishery surveys of streams in the basin revealed not only self sustaining brown trout streams but also streams capable of supporting native brook trout, absent from the basin for nearly 100

years. Stocking of wild brook trout fingerlings in some streams has since resulted in self-sustaining populations of brook trout.

After the land and water resources of the Kickapoo River Basin had reached their worst conditions in the 1930's, nearly 60 years of changes and improvements in land management were necessary for the resources to recover to near pre-European settlement conditions. Since millions of tons of soil moved from the hilltops and hillsides to the valley floor, the Kickapoo River Basin will never look or act like it did before Europeans settled the area. However, equilibrium has been reached where streams that drain agricultural lands are once again narrow, deep, clear, cold and contain healthy trout populations.

Hydrology of Driftless Area Streams

Hydrology is the study of water - its occurrence, circulation, distribution and properties. Water in Driftless Area streams is ultimately derived from rainfall and snowmelt that either percolates into the ground or runs off the land. In the most basic sense, the condition of a stream is a reflection of the watershed it drains. This concept is especially true in Driftless Area streams due to steep gradient, small watershed size and extremely steep hills. To determine the watershed of a Driftless Area stream, one need look no further than the hillsides on either side of a stream.

The steep hills found throughout the Driftless Area can shed water very quickly, consequently the vegetative cover and soil condition of hillsides are vital to the health of adjacent streams. The trees or healthy grasses that grow on these hillsides are what effectively retains water with their roots, leaves and ultimately the soil. This water then slowly moves through the underlying rock layers to become groundwater that is either pumped from wells for consumption or resurfaces as springs. Some springs in the basin flow as if from an underground pipe while others gently bubble up out of the ground. This constant source of water that averages around 50 degrees Fahrenheit throughout the year is what keeps dissolved oxygen levels high in the summer and trout eggs developing properly throughout the winter.

The greater absorption capacity within a watershed in the Driftless Area, the more water can percolate into the ground which slowly, but eventually, reaches a stream via clean cool springs. In a watershed with little or no absorptive capacity, for example one with acres of concrete, rooftops or soil devoid of vegetation, rainfall moves quickly over these surfaces to the nearest stream causing flash flooding.

Streamflow trends in southwestern Wisconsin were recently analyzed by comparing stream flow data to precipitation data. The study concluded that baseflow (stream flow during dry periods) has increased and peak flood flows have decreased over the last century in the Driftless Area of southwestern Wisconsin. Land management practices which allow more rainwater to infiltrate the ground rather than runoff to the nearest stream has been suggested as the primary reason for the discovered increase in baseflow and decrease in flood peaks. Since most baseflow of Driftless Area streams is derived from groundwater, an increase in the amount of groundwater would intuitively be reflected in increased baseflow. Alternately, more water soaking into the ground results in less water running off to the nearest stream thus

reducing flood levels. That's not to say that floods don't occur in the Kickapoo River Basin, but rather that they are less frequent and less severe than in the past.

Currently, the United States Geological Survey (USGS) operates three stream gauges on the Kickapoo River. These instruments record the water level and discharge, or flow, of the Kickapoo River on an hourly basis. One gauge is in Ontario, the second is downstream in La Farge and the third is further downstream in Steuben. This type of information is useful for canoeists planning a Kickapoo River float trip.

For more information on USGS gauging stations on the Kickapoo River:
<http://wi.waterdata.usgs.gov/nwis/current/?type=flow>

Recreational Activities in the Kickapoo River Valley

Two popular recreational activities in the Kickapoo River valley that rely on clean streams and rivers are canoeing and trout angling. In fact, during the 1999 summer season, anglers and canoeists spent nearly \$2 million dollars in the Kickapoo River Valley. The Kickapoo River drainage basin contains public land that can be used for a variety of recreational purposes including fishing, boating, hiking and birdwatching.

The lower end of the Kickapoo River is surrounded by the Kickapoo River Wildlife Area - Wauzeka Unit and the Kickapoo River Wildlife Area - Bell Center Unit which includes over 7,000 acres of DNR owned land and DNR easements offering fishing, hunting, and birdwatching opportunities.

The Nature Conservancy owns land just west of Steuben called the Hogback. This hill rises several hundred feet above the valley floor and harbors an excellent example of a native Wisconsin prairie. A wide variety of native prairie plants, birds and butterflies can be seen here.

For more information on Hogback:
<http://nature.org/wherewework/northamerica/states/wisconsin/preserves/>

Further upstream, the Kickapoo Valley Reserve and Wildcat Mountain State Park flank the Kickapoo River between La Farge and Ontario. Within this stretch, numerous bridges provide easy access to the river for canoeists. Wildcat Mountain State Park offers beautiful vistas of the Kickapoo River valley with a hilltop view 400 feet above the valley floor. Camping, horseback riding, hiking, fishing and canoeing can all be enjoyed in this state park. The Kickapoo Valley Reserve offers camping, hiking and canoeing also. See the History of the La Farge Dam Project inset.

For more information on the Kickapoo Valley Reserve:
<http://kvr.state.wi.us/static/>

Further upstream, the Elroy-Sparta State Trail runs parallel to and crosses the Kickapoo River near Wilton. This trail traverses the northern portion of the Kickapoo River Valley from east to west through Wilton and Norwalk.

Throughout the Kickapoo River valley, the Wisconsin DNR has purchased easements along numerous streams for angler access. Streams with WDNR owned easements are identified in the watershed narratives for the Lower Kickapoo River Watershed, Reads and Tainter Creek Watershed, Middle Kickapoo River Watershed, West Fork of the Kickapoo River Watershed, and the Upper Kickapoo River Watershed. The DNR installs signs where access is allowed onto private lands with DNR easements along streambanks. The easement allows for access to the stream for fishing and nature observation. The land is still privately owned and landowner rights should be respected.



The Kickapoo River between Ontario and La Farge is a popular canoe destination for all skill levels. For much of this distance, the Kickapoo River flows through Wildcat Mountain State Park and the Kickapoo Valley Reserve, offering beautiful scenery from the river. Towering rock (sandstone and limestone) walls covered with unique plant life, a complete forest canopy, open meadows as well as the occasional farm field are uniquely appreciated from a water craft on the river. Numerous canoe outfitters found throughout the Kickapoo River Basin provide visitors with equipment and shuttle services. Because of the many trees that line the river, navigational hazards such as log jams and downed trees are not uncommon. The Kickapoo River at one time had as many as seven dams but currently the only dam remaining on the river is in Gays Mills. This low head dam is a navigational hazard to all boaters and should be avoided.

Past Projects and Activities in the Kickapoo River Basin

Relocation of the Soldiers Grove Business District: The Village of Soldiers Grove was incorporated in 1888 along the banks of the Kickapoo River in northern Crawford County. Throughout the next 90 years, the village experienced nearly a dozen major floods, each prompting a clean up and re-building process. The proposed La Farge dam was projected to alleviate flooding problems in Soldiers Grove, but in 1975 the decision was made not to build the dam (see History of the La Farge Dam Project inset). A few years later, after the 1978 flood, the citizens of Soldiers Grove decided to give the floodplain back to the river and move its entire business district to higher ground along Highway 61, which no longer traversed the downtown business district. This move was highlighted by another dramatic decision - to make all new buildings energy-efficient and solar-powered. The new Soldiers Grove would be the first business district of its kind in the nation. The move was completed by 1983 and was coupled with relocation of the community well out of the floodplain and the development of a park in the old business district.

Trout Unlimited Home Rivers Initiative - Kickapoo River: Trout Unlimited's large-scale watershed conservation program is the Home Rivers Initiative. Recognizing that watershed scale restoration is often expensive and time consuming, Trout Unlimited created the Home

Rivers Initiative to perform comprehensive, science-based watershed-scale restoration on important cold water rivers in the United States. The Home Rivers projects are multi-year efforts that combine scientific and economic research, community outreach, on-the-ground restoration and the development of a long-term conservation and management plan. The second Home Rivers project, which began in 1997, was located in Kickapoo River Basin.

The Home Rivers Initiative in the Kickapoo River cost about \$500,000 over three years and included donations from foundations, corporations and Trout Unlimited's Coldwater Conservation Fund. This money leveraged another \$500,000 from the State of Wisconsin and other funding sources. Project highlights include:

- Completed 25 in-stream habitat projects on 14 Kickapoo River tributaries that improved more than 4.5 miles of stream habitat.
- Helped the State complete fish and habitat surveys on more than 30 streams. The surveys helped locate remnant native brook trout populations and locate suitable brook trout habitat.
- Created a watershed plan that sets priorities for restoration and protection of stream habitat, brook trout, and rare and sensitive plants and animals.
- Raised awareness of the special nature and value of the Kickapoo River Valley.
- Spurred citizen involvement in taking care of this natural resource.

Current Projects and Activities in the Kickapoo River Basin

See this discussion in *Chapter One: Partnership Efforts in the Lower Wisconsin River Basin*.

Current Land and Water Resource Issues of the Kickapoo River Basin

Even with the good news of recovering streams, challenges to water quality still exist in the Kickapoo River Basin.

➤ A trend in the agricultural community of increased dairy herd size threatens both surface and groundwater quality in the basin if the manure generated at these large dairy operations is not properly managed. It is crucial to build manure storage facilities according to the proper design specifications in order to protect groundwater. Another crucial component of proper manure management is having enough land to spread these large volumes of manure. Since many fields in the Driftless Area are located adjacent to streams, coordinating the proper day and time to spread liquefied manure is extremely important. Frozen ground conditions, impending rainstorms, and the ability to immediately incorporate manure into the ground must all be seriously considered when determining when, how and where to spread.

➤ Just as easily as the National Farm Bill can improve the natural resources of the Kickapoo River Basin, it also has the potential to bring about drastic changes in how land in the basin is farmed. Changes in monetary compensation programs can cause a farmer to change a field rotation or grow one crop exclusively. Depending on the crop, the land may not be able to sustain itself, or on the other hand it may be a crop best suited to conditions in the basin. In any case, the economics of farming dictate how farmland is used. Since farming in the Driftless Area is unique to the rest of the State, area farmers and legislators must endorse those programs that help both farmers and the natural resources of the Driftless Area.

- Nutrient enrichment of the Kickapoo River and other downstream waterbodies such as the Wisconsin and Mississippi Rivers, causing nuisance algae blooms, originates from the lands draining to them. Due to the topographic constraints of many farms in the basin, many barnyards, feedlots and cropped fields are immediately adjacent to streams. If not properly managed, these areas can contribute large amounts of nutrient laden manure and chemical fertilizer to a stream.
- Streambank erosion is a common sight in the Kickapoo River Basin. Some eroding streambanks are raw vertical banks created by the past accumulation of sediment in the valley and the stream naturally cutting into the bank. Other eroding streambanks result from unrestricted access of livestock, which trample sloped streambanks and consume the soil retaining plants. The addition of sediment to streams in the basin threatens to eliminate existing in-stream habitat of fish and aquatic insects.
- Disturbance of steep slopes in the basin for building single family homes is becoming more common. The destabilization of already fragile hillsides can lead to movement of soils off site to nearby streams or wetlands. Landslides, which can contain extremely large rocks, have occurred on destabilized slopes during heavy rains.
- An increase in absentee landowners and their lack of historical perspective relating to land use issues of the basin threaten to repeat past land management mistakes. Whether building on a hill or adjacent to a stream, newcomers to the area haven't seen how high that beautiful stream can get or how fragile the hillside soils are when it rains. Cash crops replacing pastures must be tilled appropriately to minimize erosion. People living and working in the Kickapoo River Basin should have a good understanding of why certain land management precautions are necessary. Unfortunately fewer and fewer elderly 'locals' with first hand knowledge of problematic land management practices are around to share their insights with residents new to the basin.
- Increased development pressures in rural townships not adequately prepared for the accompanying decisions and long range implications of changing land use patterns has taxed some township staff and elected officials. Local officials must seriously consider what their township should look like in the future and what it will look like based on current land ownership and land use trends.
- The practice of grazing livestock in some wooded areas of the basin was resumed recently due to a change in tax codes. This grazing practice was proven not only inadequate for the support of livestock but also destructive to the absorptive capacity of soils in the Driftless Area.

It is crucial to educate legislators, landowners and farmers about the unique qualities, problems, and solutions of living and working on the land in the Kickapoo River Basin in order to guard against repeating past mistakes. Resolving other threats will involve partnerships with communities, units of government, individual farmers and citizens concerned about the land and water resources of the Kickapoo River Basin.

History of the La Farge Dam Project

(condensed from a study by Dr. Lynne Heasley)

Recurring disastrous floods since 1900 prompted Kickapoo River Valley residents to look for a solution. State and local legislators requested assistance from the U.S. Army Corps of Engineers (Corps). In 1962, The Corps proposed the construction of a modest earthen dam on the Kickapoo River upstream of La Farge. This proposal stemmed from a 1940 report recommending a dam above Rockton. A few years later, the Corps widened its vision to include a massive dam 103 feet high creating a 12-mile long reservoir upstream of La Farge. The whole region was impoverished, so the Corps felt the area would benefit from the economic stimulus that tourism associated with the impoundment might create. In 1969, the Corps began acquiring land in the 9,000-acre project area through purchase and condemnation. Throughout this process approximately 140 farms became federal property. In 1971 the Corps broke ground for the La Farge dam and 500 people came to celebrate along with Wisconsin's Lt. Governor and the region's U.S. Congressman. Although construction of the dam had begun, the Corps had not yet completed the newly required Environmental Impact Statement (EIS), so work on the dam and the impact statement proceeded in tandem. Ironically, after surviving legal battles and environmental protests, only four short vague sentences in the final EIS would eventually stop construction of the dam that was nearly complete. Those four sentences discussed one topic - water quality in the new lake.

The final EIS did not give an authoritative answer on water quality but hinted that it may deteriorate over an unspecified time period. Environmental groups and politicians suggested further studies which were completed by 1974. These studies concluded that even with strict land use controls, the lake would become polluted in a short time. By this time the Corps had invested nearly \$11 million in rerouting portions of two state highways and constructing three fourths of the dam structure, but the study cast a shadow over the entire project. Kickapoo River Valley residents did not approve of the turn of events and wrote letters to local and regional newspapers and packed every meeting on the dam's status. The environmental evidence against the project had grown and project costs tripled while economic benefits to area communities plummeted. Consequently in 1975 the Governor and U.S. Congressmen withdrew their support for the project. A short time later the U.S. Senate eliminated funding for completion of the La Farge dam. Local residents, especially those displaced by the project, felt betrayed by the Federal Government. To this day, an anti-government climate exists in portions of the Kickapoo River Valley.

With three fourths of the dam completed, including a 110-foot tall intake tower, and no money to complete construction, the Corps withdrew from active management of the land. The tower still stands today rising like a sentinel on the Kickapoo River. A monument to an environmental nightmare averted or a tomb marking the death of a community, depending on your perspective. Over the years, cross-country skiers, snowmobilers, hikers, horseback riders and hunters used the 9,000-acre Corps land. The land languished in administrative limbo until 1993 when residents developed a plan in which the Federal Government would transfer the land back to the State under control of a local board. It wasn't until 2000, after years of legal disputes, that the land was returned to the State of Wisconsin and a portion to the Ho-Chunk Nation. The land was named the Kickapoo Valley Reserve and placed under control of the Kickapoo Valley Reserve Management Board with local representation and the mission of making the Reserve a low-impact "ecotourism" destination providing both recreation and environmental protection.

RECOMMENDATIONS

- ◆ Fish and habitat surveys of the **Kickapoo River** upstream of Ontario should be conducted to determine its existing conditions.
- ◆ A fishery survey of the **Kickapoo River** below Gays Mills should be conducted to determine existing conditions.
- ◆ Summarize the long-term water quality data collected from the **Kickapoo River** at Steuben since 1977.
- ◆ Implement goals of Kickapoo Watershed Conservation Plan (TU plan)

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